

AMENDMENTS TO THE DRAWINGS

Applicant submits herewith replacement drawing sheets for FIGS. 10, 14, 16, 23, and 24. No new matter has been added by way of this amendment.

Applicants' specification refers to "button moldings 100, 102" in the description of FIG. 10. However, reference numbers "100" and "102" were inadvertently omitted from FIG. 10. The new version of FIG. 10 included in the attached sheets incorporates the omitted reference numbers "100" and "102."

Applicants' specification refers to "display circuit board 104" and "antenna circuit board 106" in the description of FIG. 14. However, the display circuit board illustrated by FIG. 14 was inadvertently improperly identified with reference number "106" and the antenna circuit board illustrated by FIG. 14 was inadvertently improperly identified with reference number "104." The new version of FIG. 14 included in the attached sheets replaces the incorrect reference number "104" with the correct reference number "106" for the antenna circuit board, and replaces the incorrect reference number "106" with the correct reference number "104" for the display circuit board.

Applicants' specification refers to "antenna circuit board 106" in the description of FIG. 16. However, the antenna circuit board illustrated by FIG. 16 was inadvertently improperly identified with reference number "104." The attached sheets include a new version of FIG. 16 that replaces the incorrect reference number "104" with the correct reference number "106" for the antenna circuit board. In addition, Applicants' amended specification refers to "antenna circuit board 106" in the description of FIGS. 23 and 24. However, the antenna circuit board illustrated by FIGS. 23 and 24 was inadvertently improperly identified with reference number "104." The attached sheets include new versions of FIGS. 23 and 24 that replace the incorrect reference number "104" with the correct reference number "106" for the antenna circuit board.

The attached sheets include a new version of FIG. 10 incorporating the omitted reference numbers "100" and "102," a new version of FIG. 14 correcting the reference numbers for display circuit board "104" and antenna circuit board "106," and new versions of FIGS. 16, 23, and 24 correcting the reference number for antenna circuit board "106."

Attachment: Replacement Sheets (5)

REMARKS

This Amendment is responsive to the Final Office Action dated January 27, 2006. Applicants have amended claims 6, 19, 24 and 28 to correct typographical errors. Applicants have also canceled claims 3 and 21, and added new claim 37. Applicants cancelled claims 10 and 14 in a previous amendment. Claims 1, 2, 4-9, 11-13, 15-20 and 22-37 are pending upon entry of this amendment.

Claim Objections

In the Final Office Action, the Examiner objected to claim 36 as being a substantial duplicate of claim 35 and as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicants would like to point out that claim 35 and claim 36 are not dependent from the same independent claim. Instead, claim 35 is dependent from independent claim 1 and claim 36 is dependent from independent claim 19. Therefore, claims 35 and 36 cannot be construed as being substantial duplicate claims, inasmuch as independent claims 1 and 19 have different limitations. Claim 35 further limits the subject matter of independent claim 1 from which it depends, and claim 36 further limits the subject matter of independent claim 19 from which it depends. Applicants respectfully request withdrawal of the objection.

Claim Rejections Under 35 U.S.C. § 102

In the Final Office Action, the Examiner rejected claims 1-3, 17, 35 and 36 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application No. 2004/0230246 to Stein et al. ("Stein"). Applicants respectfully traverse the rejection. Stein et al. (Stein) fails to disclose all of the features of the claimed invention, as required by 35 U.S.C. 102(e), and provides no teaching that would have suggested the desirability of modification to include such features.

Stein fails to teach or suggest a programmer for a medical device comprising an internal antenna mounted within a programmer housing, wherein the internal antenna defines an aperture, and a battery bay that extends into the programmer in substantial alignment with the aperture, wherein the battery bay extends at least partially into the aperture, as recited by Applicants' independent claim 1.

The Office Action referred to FIG. 9 of the Stein reference and asserted that Stein discloses an internal antenna (66) which defines an aperture and a battery bay (76) that extends into the aperture formed by the antenna loop (66). However, Stein does not describe a battery bay that extends at least partially into the aperture of coil 66. Instead, Stein describes a circuit board 68 carrying a pair of battery contacts 77. Batteries 76 are inserted between the battery contacts 77. A rear opening 86 permits batteries 76 to be replaced by a user. Coil 66 is positioned between circuit board 68 and a case front 60. However, Stein fails to disclose or suggest a battery bay extending at least partially into an aperture defined by coil 66.

Stein also fails to teach a battery bay that extends into the programmer in substantial alignment with the aperture, as recited by Applicants' independent claim 1. Stein makes no mention of the battery contacts 77 included on circuit board 68 or batteries 76 inserted between battery contacts 77 in alignment with the aperture of coil 66. Clearly, Stein does not disclose the features of independent claim 1, nor the features of claims 2, 17 and 35 that are dependent from claim 1.

In addition, Applicants do not admit or acquiesce in the legitimacy of the Stein reference as prior art against the claimed invention, and reserve the right to dispute the prior art status of the Stein reference in any future communication. In view of the structural differences between the invention defined by independent claim 1 and the Stein device, however, Applicants reserve further comment at this time.

Stein fails to disclose all of the limitations set forth in claims 1-3, 17, 35 and 36. For at least these reasons, the Office Action has not established a prima facie case of anticipation of Applicants' claims 1-3, 17, 35 and 36 under 35 U.S.C. 102(e). Withdrawal of this rejection is requested.

Claim Rejections Under 35 U.S.C. § 103

In the Final Office Action, the Examiner rejected claims 4, 15-16, 19-22 and 31-33 under 35 U.S.C. 103(a) as being unpatentable over Stein. The Examiner also rejected claims 5-9, 11-12, 18, 23-29 and 34 under 35 U.S.C. 103(a) as being unpatentable over Stein in view of U.S. Patent No. 6,648,821 to Lebel et al. ("Lebel"). The Examiner further rejected claims 13 and 30

under 35 U.S.C. 103(a) as being unpatentable over Stein in view of U.S. Patent No. 6,249,703 to Stanton et al. ("Stanton").

As described above, Stein fails to teach a battery bay that extends into the programmer in substantially alignment with the aperture, wherein the battery bay extends at least partially into the aperture defined by the internal antenna, as recited by Applicants' independent claim 1. Clearly, Stein does not disclose the features of Applicants' claims 4 and 15-16 that are dependent from claim 1. Mere design choice is not capable of overcoming the deficiencies of the Stein reference.

In regard to Applicants' independent claim 19, Stein fails to teach or suggest a programmer for a medical device comprising a programmer housing, an internal antenna mounted within the programmer housing, wherein the internal antenna defines an aperture, and a battery bay formed within the programmer housing, the battery bay being aligned substantially concentrically with the aperture.

The Office Action stated that Stein teaches substantially all of the features of Applicants' claim 19, but acknowledged that Stein does not disclose a battery bay that is aligned substantially concentrically with the antenna aperture. However, the Office Action asserted that it would have been an obvious matter of design choice to a person of ordinary skill in the art to concentrically align the battery bay of Stein with the aperture formed by the loop antenna.

In Stein, a circuit board 68 carries a pair of battery contacts 77 at a bottom portion of the circuit board. Batteries 76 are inserted between the battery contacts 77. Batteries 76 and battery contacts 77 are certainly not placed in concentric alignment with the aperture of coil 66. Nor does Stein provide any teaching that would have suggested such an arrangement.

Concentric alignment of a battery bay with an aperture of an internal antenna, per claim 19, would not have been an obvious design choice. Neither Stein nor any other prior art teaching would have suggested the desirability of modification to provide such an arrangement. As described in Applicants' disclosure, for example, the placement of the battery bay within the aperture enables the programmer to maintain a smaller size. This feature may be particularly advantageous for reduction of programmer size when larger, consumer-replaceable batteries, such as AAA batteries, are used. Clearly, Stein contemplates smaller batteries that do not even

present the size issues that would have caused one of ordinary skill in the art to contemplate size reduction in the manner required by claim 19.

In addition, this arrangement can reduce external magnetic interference to the antenna by providing an RF load, enhancing noise immunity. Of course, Stein fails to provide any teaching concerning noise immunity or antenna loading. Indeed, even if the batteries described by Stein did present a load to coil 66, there is no teaching that would have suggested the further arrangement of the batteries in concentric alignment with the coil aperture, particularly inasmuch as Stein does not even consider the enhanced noise immunity that could be achieved by such an arrangement.

In the absence of such teachings in the prior art, one of ordinary skill in the art would have found the necessary guidance to arrive at the invention of claim 19, only upon access to Applicants' disclosure, which is impermissible. Applicants respectfully submit that any motivation to make the modifications suggested by the Office Action would have come only from Applicant's own disclosure. Absent a teaching of such motivation in the prior art, the rejection under section 103 is improper and should be withdrawn. Clearly, Stein does not disclose the features of independent claim 19, nor the features of claims 20, 22-34 and 36 that are dependent from claim 19.

In regard to Applicants' dependent claims 5 and 23, both Stein and Lebel fail to teach or suggest the programmer comprising a first housing member, a first circuit board within the first housing member, a second circuit board disposed over the first circuit board within the first housing member, and a second housing member disposed over the second circuit board to substantially enclose the first and second circuit boards, wherein the first housing member includes a molded area that defines the battery bay adjacent the first circuit board.

The Office Action asserted that Stein teaches the features of Applicants' claims 5 and 23, but acknowledged that Stein does not disclose a second circuit board disposed over the first circuit board. However, the Office Action stated that Lebel discloses a communication device to communicate therapy parameters to an implantable medical device, and that Lebel teaches that additional circuit boards may be added to the communication device as necessary for the communication device to perform additional functions. Therefore, the Office Action asserted that it would have been obvious to one of ordinary skill in the art to incorporate an additional

circuit board into the controller of Stein in order for the programmer to perform all of the functions desirable for its use.

Lebel provides no teaching capable of overcoming the deficiencies of Stein. Furthermore, Lebel does not disclose or suggest the features attributed to it by the Office Action. Merely incorporating an additional circuit board is not all that is required by Applicants' claims. Rather, claims 5 and 23 specify a first circuit board within a first housing member, a second circuit board disposed *over* the first circuit board, and a second housing member disposed over the second circuit board to substantially enclose the first and second circuit boards.

With respect to these limitations, the Office Action pointed to Col. 41, line 63 – Col. 42, line 15 of Lebel. However, this passage of Lebel merely refers to the incorporation of one or more “hybrid circuit boards” within a device housing, with no regard to the particular structural relationship between such boards. Therefore, it is unclear how Lebel could have suggested a second circuit board disposed *over* a first circuit board. In fact, Lebel provides no indication of such a configuration, and merely states that such boards may be mounted “within, on, or even in some cases external to a device housing.”

As described above, Stein fails to teach a battery bay that extends into the programmer in substantially alignment with the aperture, wherein the battery bay extends at least partially into the aperture defined by the internal antenna, as recited by Applicants' independent claim 1. Lebel does not disclose any teaching capable of overcoming the deficiencies of the Stein reference. Clearly, Stein and Lebel, either singularly or in combination, do not disclose the features of Applicants' claims 5 and 18, which are dependent from claim 1, and Applicants' claims 6-9 and 11-12 that are dependent from claim 5.

As described above, Stein also fails to teach a battery bay formed in the programmer housing, the battery bay being aligned substantially concentrically with the aperture defined by the internal antenna, as recited by Applicants' independent claim 19. Lebel does not disclose any teaching capable of overcoming the deficiencies of the Stein reference. Clearly, Stein and Lebel, either singularly or in combination, do not disclose the features of Applicants' claims 23 and 34, which are dependent from claim 19, and Applicants' claims 24-28 that are dependent from claim 23.

In regard to Applicants' dependent claims 13 and 30, Stein and Stanton fail to describe each and every feature of Applicants' independent claims 1 and 19 including an external antenna coupled to the programmer via a cable, as recited by Applicants' dependent claims 13 and 30. As described above, Stein fails to teach a battery bay extended at least partially into an aperture defined by an internal antenna or a battery bay aligned substantially concentrically with an aperture defined by an internal antenna. Stanton provides no teaching capable of overcoming the deficiencies of Stein.

In view of the foregoing remarks, the Office Action did not establish a prima facie case of obviousness of Applicants' claims 4-9, 11-13, 15-16 and 18-34 under 35 U.S.C. 103(a). Withdrawal of this rejection is requested.

New Claims:

Applicants have added claim 37 to the pending application. The applied references fail to disclose or suggest the inventions defined by Applicants' new claim, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed inventions. For example, the references fail to disclose or suggest a programmer for a medical device comprising a first housing member, a first circuit board within the first housing member, an internal antenna that defines an aperture mounted to the first circuit board, a battery bay formed in the first housing member adjacent the first circuit board that extends into the programmer in substantial alignment with the aperture of the internal antenna, wherein the battery bay is aligned substantially concentrically with the aperture, an access opening in the first housing member to gain access to the battery bay for placement of batteries in the battery bay, a second circuit board disposed over the first circuit board within the first housing member, and a second housing member disposed over the second circuit board to substantially enclose the first and second circuit boards, as recited by claim 37. No new matter has been added by the new claim.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims.

In view of the distinctions addressed above between the current claims and the applied prior art, Applicants reserve further comment at this time on any other features of the independent or dependent claims. However, Applicants do not necessarily acquiesce in any of the rejections or the Examiner's interpretations of the applied references. Applicants reserve the right to present additional arguments with respect to any of the independent or dependent claims. In addition, Applicants do not admit or acquiesce in the legitimacy of the Stein reference as prior art against the claimed invention, and reserve the right to dispute the prior art status of the Stein reference in any future communication.

Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed agent to discuss this application.

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